

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An isolated RNA comprising an artificial intron RNA that is released in a cell, thereby silencing the function of a target gene.
2. (Previously Presented) The isolated RNA of claim 1, wherein the artificial intron RNA contains a splice donor site, a splice acceptor site, a branch site, and a poly-pyrimidine tract.
3. (Previously Presented) The isolated RNA of claim 1, wherein the cell is a mammalian cell.
4. (Previously Presented) The isolated RNA of claim 2, wherein the splice donor site contains 5'-AGGUUAAGU-3'.
5. (Previously Presented) The isolated RNA of claim 2, wherein the splice acceptor site contains 5'-CCACAGC-3'.
6. (Previously Presented) The isolated RNA of claim 2, wherein the branch site contains 5'-UACUAAC-3'.
7. (Previously Presented) An isolated RNA comprising an artificial intron RNA that is released in a eukaryotic cell, thereby silencing the function of a target gene.

8. (Previously Presented) An isolated RNA comprising an artificial intron RNA that is released in a eukaryotic cell, thereby silencing the function of a target gene, wherein the artificial intron RNA contains a splice donor site that includes 5'-AGGUUAAGU-3', a splice acceptor site that includes 5'-CCACAGC-3', a branch site that includes 5'-UACUAAC-3', a poly-pyrimidine tract that includes 5'-UUCUUUUUUUC-3' (SEQ ID NO:2), or a combination thereof.

9-10. (Canceled)

11. (Original) A cultivated cell comprising the isolated RNA of claim 1.

12-18. (Canceled)

19. (Original) A composition comprising the isolated RNA of claim 1.

20-57. (Canceled)

58. (Currently Amended) The isolated RNA of claim 1, wherein the artificial intron contains a sequence that targets an exon of the target gene, wherein the target gene is integrin 81.

59. (Currently Amended) The isolated RNA of claim 7, wherein the artificial intron contains a sequence that targets an exon of the target gene, wherein the target gene is integrin 81.

Appl. No. 10/663,875
Amdt. Dated April 16, 2010
Reply to Office Action of October 16, 2009

Attorney Docket No. 89188.0050
Customer No.: 26021

60. (Currently Amended) The isolated RNA of claim 8, wherein the artificial intron contains a sequence that targets an exon of the target gene, wherein the target gene is integrin 81.